

**TYPE A1 WITH FIXED SEAT**

**TYPE A1 WITH SEMI-EXPANSION SEAT**

**LEGEND**

- \*5 BARS AT 1'-0" (2'-0" LONG). THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- ◇ WHEN THIS DIMENSION ≥ 4" THIS ADDITIONAL REINFORCEMENT SHALL BE ADDED.
- USE 2'-6" FOR ALL SLAB SPANS AND FOR GIRDER SPANS WITH NO PAVING NOTCH EXCEPT 54", 54W", 70" & 72W" GIRDERS WITH SKEWS > 25° - USE 2'-9". USE 3'-2" FOR GIRDER SPANS WITH PAVING NOTCH.
- DIMENSION IS FROM BOTTOM OF ABUTMENT TO LOW BEAM SEAT OR LOW SIDE OF SLAB TYPE SUPERSTRUCTURE.
- 18" RUBBERIZED MEMBRANE WATERPROOFING, SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.
- ▲ KEYED CONST. JOINT FORMED BY BEVELED 2" x 6".
- \*\* WINGWALL WIDTH SHALL BE 1'-6" WHEN TYPE "M" RAILING OR VERTICAL FACE PARAPET, TYPE "TX" IS USED.

**DESIGNER NOTES**

LAP LENGTHS FOR HORIZONTAL BARS SHALL BE BASED ON A "CLASS C" TOP TENSION LAP SPLICE.

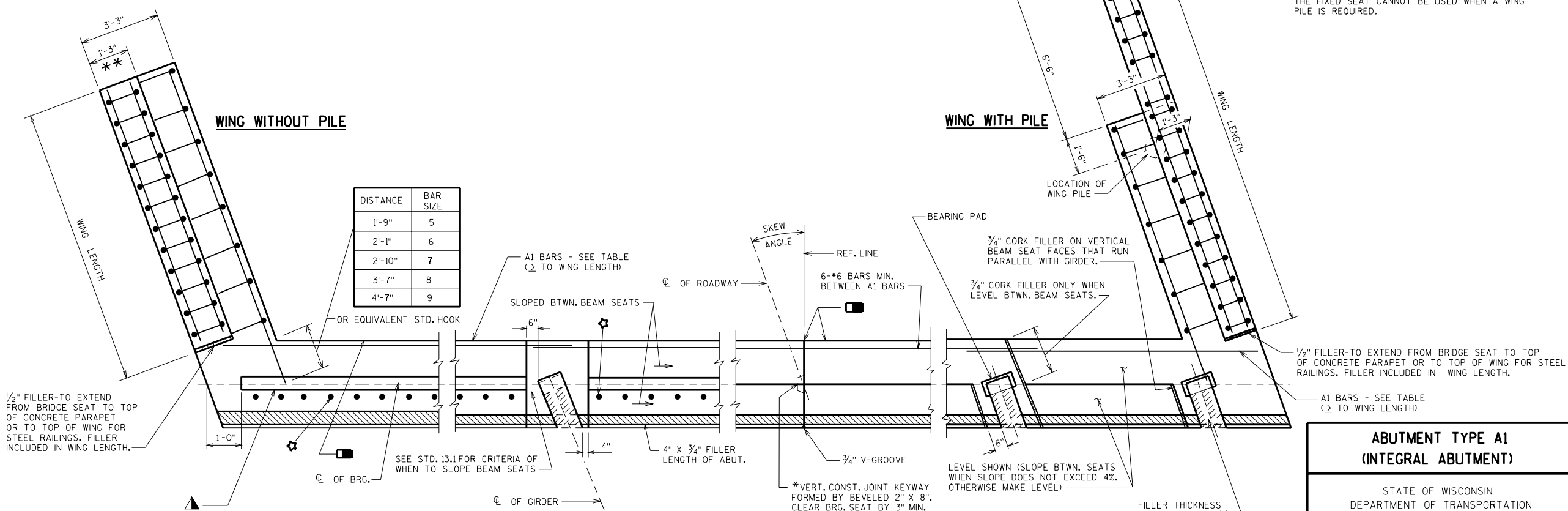
PILING SPACING IN ABUTMENT BODY SHALL BE 8'-0" MAX. FOR ALL TYPES OF PILING.

\*WHEN BODY SECTION IS > ± 50'-0" LONG PROVIDE VERTICAL CONSTRUCTION JOINT. RUN BAR STEEL THRU JOINT, SEAL JOINT WITH 18" RUBBERIZED MEMBRANE WATERPROOFING. SEE STD. 12.9 FOR ALTERNATE CONSTRUCTION JOINT.

CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.6.3 STANDARD SPECIFICATIONS.

THE SEMI-EXPANSION SEAT SHALL BE USED WHEN REQUIRED AS STATED IN CHAPTER 12, TABLE 12.1 OF THE BRIDGE MANUAL OR WHENEVER A WING PILE IS REQUIRED.

THE FIXED SEAT CANNOT BE USED WHEN A WING PILE IS REQUIRED.



**SLAB SPAN WITH FIXED SEAT**

**GIRDER SPAN WITH FIXED SEAT**

**SLAB SPAN WITH SEMI-EXPANSION SEAT**

**GIRDER SPAN WITH SEMI-EXPANSION SEAT**

**ABUTMENT TYPE A1 (INTEGRAL ABUTMENT)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION  
STRUCTURES DEVELOPMENT SECTION

APPROVED: *Stanley W. Woods*

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